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No. 183

CONTENTS

POLITICAL AND SOCIOLOGICAL	
Role of MITI Reportedly Facing New 'Crisis' (SENTAKU, Jun 83)	1
MILITARY	
Testimonies on Sealane Defense in Diet Reported (TOKI NO KADAI, Aug 83)	8
ECONOMIC	
Dynamics of Japanese Effectiveness in 1970's Reported (B. N. Dobrovinskiy; IZVESTIYA AKADEMII NAUK SSSR: SERIYA EKONOMICHESKAYA. No h. Jul-Aug 83)	17

POLITICAL AND SOCIOLOGICAL

ROLE OF MITI REPORTEDLY FACING NEW 'CRISIS'

Tokyo SENTAKU in Japanese Jun 83 pp 64-67

[Article: "The Sorrow of MITI, Which Has Slipped to a 'Second-Rate Agency'"]

[Text] A wave of trade liberalization assaulted industrial circles beginning in the second half of the third decade of the Showa era [the early 1960's]. At this time there emerged a "theory of the uselessness of MITI," which split the ministry in two, and MITI was shaken to its foundations. The ministry was enveloped in the pessimistic argument that, having allowed the imperial banner of "control" to slip out of its grasp due to liberalization, it no longer had a base on which to stand.

However, as soon as the era of trade liberalization was reached, MITI, fully utilizing the tax system and subsidies which took the place of the former "authority," devised the "administrative guidance" whereby it manipulates the business world by means of policy, and did a splendid job of riding out the "crisis."

Now, more than 20 years later MITI is about to face a new "crisis." In a word, as Japan's economy is entering an era of stable growth, the content of MITI's work is changing from the role of leader of the industrial world to the conservative job of "problem solver."

As though symbolizing this "crisis" which is stealthily approaching, within the ranks of junior officials and among the most active officials at MITI, a sense of crisis and frustration has begun to appear. What has happened at MITI, which was counted, along with the Ministries of Finance and Home Affairs, as a first-class government agency?

The "Wait and See" MITI administration"

It is said that lately the ventilation has been poor at MITI and the air is stagmant. It is said further...that one gets into trouble for talking. And it is also said that since Sadanori Yamanaka took office as minister of international trade and industry at the end of last year, that tendency has become more pronounced.

This is because it has reached the point whereby whenever some news that Minister Yamanaka doesn't like appears in the press, the responsible department chief or official is sure to be called in and asked to give a detailed accounting.

At the end of January this year, seven officials of MITI accompanied Minister Yamanaka when he visited the EC (European Community) Commission for the purpose of attending a Japan - EC symposium. They had many discussions with EC Commission Vice President Davignon and his team regarding the list of items covered by voluntary restraints on exports. It is said that the minister threatened the seven who had accompanied him regarding what became the crux of the negitiations, the number of Japanese-made video tape recorders to be exported (4.55 million), telling them: "Keep this top secret. I'll have your jobs if this leaks out to the media."

On 11 February an EC delegation was to come to Japan to hold the final discussions. Nevertheless, MITI officials were not allowed to consult with related government departments such as the Ministry of Foreign Affairs, or to indicate to responsible sections within MITI how to deal with the negotiations, so they were overcome with impatience. Finally, when it had gotten to the 8th of February a few days before the meeting, Kunio Komatsu, MITI councilor and leader of the seven who had accompanied the minister on his trip, implored the minister, "We cannot work like this," and hurriedly went around laying the groundwork.

This is not a special case, occurring just because Minister Yamanaka is stiffnecked and a powerful member of the prime minister's faction.

At the general meeting of OPEC last March, the price of crude oil went down by \$5 a barrel. That was the best possible opportunity for action by MITI, which had created the Agency of Natural Resources and Energy and had concentrated all its efforts on a policy to deal with energy. But it still has not come up with a policy to effectively exploit this one-in-a-million opportunity.

If the price goes down \$5, in the case of Japan, this means a profit margin of \$6 billion (annually). It is estimated that the petroleum industry and the electric power industry would each receive about half of that profit. Gasoline and kerosene are all right, because if you let the market principles operate freely, competition will intensify and in the end prices will go down, but electric power is a problem.

MITI's current response is to maintain the existing charge for power without any reduction. In return the electric power industry will be required to "move up" to the first half of the year the investments in plant and equipment which were planned for the second half of the year. In addition, it will be required to set aside a further 300 billion yen for the cost of repairs.

In this regard the criticism was made by an unnamed bureau chief within MITI that the "policy has no coordination." There is no clear explanation of why a "stable price," about which there is no mention of the number of years it will last, turns out to provide a return of profit to the people of the nation.

Even if the companies move up the date of investment in plant and equipment, there is neither an increase nor a decrease in the total amount, so its effectiveness in improving economic conditions is extremely doubtful. In the final analysis, the only thing gained is a mere additional 300 billion yen added to investment in plant and equipment as the cost of repairs. Even if the remainder of the gigantic profits are put into a glass-enclosed special reserve fund, it is impossible to check on the use to which the bank holding it is putting it.

Banks, too, in the current era, can think of nothing but developing nations, investment in gold or the National Railway as outlets for large financing, and aside from that about all they do is purchase government bonds. There is concern that, if this is how it turns out, MITI may not be able to fully exploit this precious opportunity with domestic economic countermeasures.

It has been a special characteristic of MITI in recent times that in spite of the fact that this sort of criticism exists, such opinions merely go on smoldering inside MITI and no whisper appears in the mass media.

In regard to policy on economic conditions as well, those at the department chief level at MITI are discontented at being unable to say what they wish. A certain department head of the Industrial Policy Bureau is preparing a report on a policy for stimulating internal demand which includes the lowering of the official interest rate and the expansion of government financing, but for the sake of caution Keiichi Konaga, chief of the Industrial Policy Bureau, and Kazuo Sugiyama, assistant secretary, are not making any of it public.

It is said that caution is necessary because, aside from the question of whether or not it is their true intention, the Nakasone government is wrestling with the rebuilding of government finances, and because the official interest rate is the exclusive administrative territory of the Bank of Japan.

In other words, before taking any action, MITI considers the results far in the future and ends up doing nothing. Last year the Secretariat Research and Planning Department of the Ministry of Finance initiated "study meetings on structural changes in the economy and government policy" (convenor: Ryuichiro Tachi, director of the Accounting Officials Training Institute) and although it challenged MITI by saying that it was studying an economic policy that would not use government funding, MITI, which should be taking charge of this, is in a stagnant condition.

It has been said regarding MITI: "Up until about 1975, one could see junior officials engaged in animated debate. They did things like purposely leaking their own policies to newspaper reporters to see the reaction of senior officials, and guided policy in the direction they desired" (newspaper reporter), but lately the junior and main force officials look at the expression on the faces of senior officials and keep quiet. It is said that even if they have criticisms, they don't leak them outside, and if they do they hide behind the phrase "a personal opinion."

In such a situation, a mood of inactivity vaguely pervades the ministry. In February last year reports that criticism of Japanese industrial policy was flaring up in the U.S. Government and in Congress came to the International Trade Policy Bureau one after the other from MITI officials who were stationed in Japanese consulates in the United States and in the U.S. offices of JETRO. But MITI welcomed U.S. Secretary of Commerce Baldridge and his party to Japan on 17 May without having been able to take any concrete countermeasures at all.

Lately nothing that MITI does goes right.

The Strange Antics Following the Oil Crisis

In the past, MITI overcame a crisis and then was praised with the words: "As might be expected, they vie wholeheartedly over policy and do not depend on politicians" (a former accountant of the Ministry of Finance who was in charge of MITI's account). And even the Ministry of Finance kept a watchful eye on MITI. What has happened to MITI in spite of that record?

It is said that as soon as Yamanaka took over as minister of international trade and industry, he read "Commercial Law" [Tsusho roppo] in order to understand the administrative powers of MITI, but he said: "I didn't understand a word of it."

That is natural. One could say that there is just an "establishment law" and nothing else. The reason for MITI's existence is that it carries on activities which are not codified in law, and because of that the "administrative guidance" it is able to exercise smoothly and without impediment is the source of the power that is responsible for it being called a first-class government agency.

As we have seen, things have suddenly change. A certain junior official who has been with the ministry almost 10 years frankly points out: "For the 10 years since the oil crisis of 1973 we have been almost completely unable to work out policies which anticipate what is going to happen. In other words, with the oil crisis and trade friction we have descended to being a "cleanup agency" which only responds to matters that have already arisen."

Why has this happened? One reason is something which applies to all government agencies: the fact that politics has become administration and administration has become politicized. Politics has traveled by way of the Diet and invaded what was originally the territory of administration, and on the administration side as well, when things come up they deal with politicians. In particular, it is said that two-thirds of the work of bureaucrats is taken up by the gathering of hypothetical questions and answers in the Diet. At present the gathering of collections of hypothetical exchanges has become the biggest job of bureaucrats.

One would expect that MITI, which does not possess the power of authorization would originally have been relatively free from this sort of political difficulty. But when it comes to the point of having something like the "large store law" which regulates the establishment of branch stores, it is bound to get invovled with politicians, and so at MITI too, administration has become politicized.

The second reason is an element peculiar to MITI. Precisely because MITI had very little power or money (subsidies, etc) compared with other ministries, it made up for it by using talent and brains, but after the oil shock it came to have money too.

This was due to the establishment of the petroleum tax which went into effect on 1 June 1978. The petroleum tax money was put into what had previously been a special account just for coal, and a new special account was created.

At the time, the tax was resisted by the petroleum industry on the grounds that it was difficult to pass the amount of the tax on to the price of petroleum products. But it was resolved because MITI said that it would return most of the tax revenue, which runs to almost 200 billion yen in the average fiscal year, to the industry in the form of funding for an energy policy. And that is how the tax was born.

What happens when a government office which is not accustomed to having money gets its hands on a large amount? It has been said: "In that respect, MITI is no different from others such as the Ministry of Agriculture, Forestry and Fisheries in its administration which scatters subsidies all around."

It has resulted in subsidies literally being scattered around NEDO (New Energy Development Office), which began with the help of MITI, without even focusing on a target. In this, too, it is said that the desire to control the related industry by means of money is obvious. And in the naphtha war between imported and domestic made products which occurred twice, rather than considering placing domestic naphtha outside the provisions of the petroleum tax in the same manner as imported naphtha, MITI decided on a policy of providing some sort of subsidy for the domestic product. Though the result is the same, this shows that MITI is manacled by the money it has received. All MITI can think about is how to apportion the money. Its thinking has lost flexibility. The former MITI officials who ran around to set up the "petroleum tax" now also admit that they left behind a bad legacy.

There Is No Longer a Sense of Balance

It is also said that another reason for MITI's stagnation is the fact that although the "glorious class of 53," the excellent crop of staff members who entered MITI in 1953, rose to be top bureau chiefs, they all left their positions in about a year for jobs in the Agency of Natural Resources and Energy, or the Small and Medium-Size Enterprises Agency, or the Patent Office, or ended up leaving for private industry.

The only two holding bureau chief posts are Kazuo Wakasugi (present chief of the Patent Office) and Konaga. The class of 53 arrived in the year of change from the old style high school to the new style university; there were a lot of them, but they can be said to have experienced for a long time the lower social status of the division chief who is not quite a bureau chief, the under secretary class. And yet, as soon as they rose to the forefront as bureau chiefs, most of them vanished in an instant.

It is said: "The members of the class of 53 were somewhat more individualistic. For that reason, when compared with classes from other years, their sense of group identity was weak and they were not able to unite; that was probably one reason." (news source)

Trade friction and energy policy were suitable "work" appearing before the eyes of MITI, which was in the process of stagnating. MITI's headlong plunge into petroleum following the first oil shock was especially amazing. In the past 10 years, as high as 80 percent of the departments set up by new regulations under government ordinances are concerned with energy (11 departments, such as the Petroleum Supply and Demand Department, the Energy Economy Policy Department, and the Alternative Energy Department), leaving only 3 other departments: the Chemical Safety Department, the Retail Sales Department, and the Small Enterprise Department.

Petroleum is a big problem for Japan. The more that people ranted, making a fuss about toilet paper, the more MITI rhould have made policy calmly with its eyes fixed on the ground at its feet; but instead, MITI stood at the head of the mob and for a time appeared to be inciting people over the "petroleum crisis." Although among the MITI personnel there were those who held solid views regarding our nation's natural resources, all of them plunged headlong into petroleum.

In Kakuei Tanaka's book, "Plan for the Reconstruction of the Japanese Islands," which MITI officials had a hand in writing, there is a passage which says: "Snow is a natural dam." This shows recognition that pure water, which is said to be nontransferrable by ship, is the most precious resource. Although Middle Eastern nations tried pouring oil money into projects to make their lands green, the salt content of the underground water was too high, so they failed. Since they lacked pure water, they could not even grow trees, so they could not make their lands bloom.

To the nations of the Middle East, pure water is a resource which is as precious as oil is to Japan, or more precious still. Our nation, which is rich in water resources, has lost sight of the big picture proclaiming too much that "Japan is a nation without resources."

From MITI we can no longer expect even that important sense of balance.

For the Most Active Leaders, a Sense of Frustration; for Junior Staff Members, a Sense of Crisis

It is said that MITI officials are now "becoming small weathervanes." The people who go on rising to high positions are not those who resolutely voice their opinions, but rather those who check which way the wind is blowing and act accordingly. People who go against the current do not get ahead, and the tendency for them to leave government service has been growing stronger.

Of a certain MITI official, who is viewed as third in line as candidate for vice minister, it is said that since the time when he was a department head he has always sought the opinion of superiors, or pointed out two or three

options and sought a judgment, before forming an opinion of his own. Within the ministry he is said to be an expert at perceiving which way the wind is blowing, and it has reached the point where that sort of person keeps getting ahead.

The remark has been made: "The ranks of the most active leaders who put work first are permeated by a feeling of frustration, and junior staff members who still cannot abandon their dreams are filled with a sense of crisis" (a certain powerful department head among the most active leaders).

In such a situation, there is no reason to expect intensity to show up in their everyday work. For one thing, as mentioned before, it seems likely that the Ministry of Finance will get ahead of them in terms of the formulation of new theory on economic policy, and even in the matter of the deregulation of public circuits they were not able to break down the stronghold of the Ministry of Posts and Telecommunications. MITI declared that the Information Management Division should be separated from Nippon Telegraph and Telephone Public Corporation, which is under the jurisdiction of the Ministry of Posts and Telecommunications, but it was steamrollered by the Ministry of Posts and Telecommunications, which got even the business world behind it. Lately, MITI is being blamed by business circles who say: "MITI put its nose where it didn't belong."

Even in the power struggle over trade friction, MITI was blocked by the Ministry of Foreign Affairs and so on and shriveled up. Originally MITI was an exponent of the package deal (comprehensive transaction), but at some time or other while struggling with the Ministry of Foreign Affairs over who would be the leader, it stopped reaching out to areas outside its direct jurisdiction (such as the cultural, political and military questions which cannot be separated from trade friction).

In regard also to the fields of bio-industry, space industry, marine exploration, fine ceramics and such, over the past 2 or 3 years MITI has set up "rooms" to come to grips with them, but it has completely adopted makeshift positions.

It is like the saying: "If one becomes poor, one becomes insensitive." In the old days, before one became a bureau chief one would receive an offer from private industry and would leave government service in a grand manner, but nowadays it has changed so that one leaves government service because of frustration. A certain person with experience as an assistant secretary, who had hoped to enter private industry, was rejected by a leader of the Mitsubishi group, who said: "Anyone but that person." And it is said that recently MITI has also begun to display a tendency to regard any post which has once been held by one of its former bureaucrats as having become the vested interest of the ministry. It is an imitation of the tricks of the Ministry of Finance, which is well known for using its power of authorization as leverage to have people offered good positions.

But the current leaders of MITI boast: "In the prevar and postwar history of MITI there has never been a time when we grappled with various problems as confidently as now." Has the leadership long since firmly decided that there is no path but that of being a cleanup agency which handles problems?

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MILITARY

TESTIMONIES ON SEALANE DEFENSE IN DIET REPORTED

Tokyo TOKI NO KADAI in Japanese Aug 83 pp 40-53

[Third and last part of the transcript of four expert testimonies on the problem of sealane defense at the Special Committee on Security, the House of Councillors, Japanese Diet, on 11 April 1983 (as reported by the chairman of the committee, Masao Horie)]

[Text] Full-Scale Nuclear War Outbreak?

Assemblyman Shibuya: In the present setting of U.S.-Soviet antagonism, will there be a full-scale war in the future, or if there is a limited war, can the scale and circumstances of such an outbreak be forecast? There is also the problem of the Korean Peniasula. What is your opinion of the possibility of a full-scale war breaking out from the very beginning, or if that definitely will not occur, the possibility of a limited war?

Consultant Asonuma: I think a U.S.-Soviet war with a full-scale nuclear exchange is unlikely.

However, it is a fact that while the checking of nuclear war has been effective, various disputes have broken out in various places in the world. The status quo cannot easily be restored. An ironic situation arises in that restoration has a reverse effect on checking nuclear war. Consequently, it is a serious matter that under a nuclear strategy structure, there is no way to make this an accomplished fact. As for the significance of that, I think there must be research on the best way to make it an accomplished fact.

Consultant Unabara: To begin with, there is a possibility of U.S.-Soviet nuclear war but as I also said about this a little while ago, I consider that not to exist.

However, as I said before, the fact is that we do not fear nuclear war involving the Soviet Union. I think that whatever is preferred, this is the conclusion of various sides.

As I also said in a seminar about engaging in nonnuclear war, the Soviet Union's way of thinking about the present matter is to have the national objective of communication of the world, and in order to accomplish this objective there are righteous wars, people's liberation wars. The communists, having an unchanging view that those wars are inevitable, profess to stand in the vanguard.

Fear Magnified in Asia

Consultant Kitamura: My views on engagement in a nuclear war are as I said before. My thinking on whether full-scale war will break out is that it might occur.

An example of that is the case of the Middle East. I don't know how this is progressing, but in the degenerated situation of the military balance between East and West, the Soviet Union is advancing in some areas. I think that perhaps if the Middle East coastal oil-producing area were to come under the control of the Soviet Union, causing the collapse of the Western alliance, then possibly America would take a stand at that time. I think that if that could not be settled locally, it could not avoid spreading to Northeast Asia or the Northwestern Pacific.

Consultant Pujii: I have read periodicals, for example NATIONAL DEFENSE, in which the director general of the Defense Agency, Mr Scsa, said that if Japan were engulfed in a disastrous war, in a third world war, it is not likely that it would be a war of all countries other than Japan.

Then, speaking of the possibility of the outbreak of a third world war, because there are only two nations, the United States and the Soviet Union, that possess the capability of stopping it, I think you could say that it is not likely without this capability but that it is possible by making adjustments in some conditions and the above capabilities. And this should be borne in mind regarding nuclear war also. Despite what Mr Unabars said a little while ago, the Soviet Union teaches its citizens that even in a nuclear war, they must observe their station in life. On the other hand, America has introduced the concept of limited nuclear war. Of course, this naturally means that there is also a possibility of limited nuclear war expanding into full-scale nuclear war.

Road to Arms Expansion

Assemblyman Shibuya: The question arises of military balance, especially concerning nuclear weapons, the future extension of this military balance and whether that balance will collapse. In the event the balance is destroyed, it cannot serve the function of a restraining force for avoiding war. Now the danger is increasing greatly, as indicated by Mr Fujii. In that case, with the thought of reducing the U.S.-Soviet struggle, are we not rushing impetiously on a course toward arms expansion? Thus, out of concern about nuclear weapons comes the spur for the necessity of thinking about the increasing danger of proceeding impetuously on a course toward arms expansion.

Consultant Fujii: Even though it is said that the nuclear balance is continually collapsing, I think this is paradoxical, but for the better. In short, whenever one side is superior, the other side endeavors for more area expansion in order to rally, and then that side becomes superior. Comparing

the present circumstances with those of 20 years ago, there is an increase in strategic nuclear weapons of almost 200 times. Even today a concrete example is the negotiations for limiting tactical nuclear weapons in Europe; but looked at separately, these definitely do not balance; in ICBM's the Soviet Union excels, in SLBM's America excels, in explosive power it is the Soviet Union, and due to the extent of endeavors to fill such gaps, it is concluded that on the whole there is a leveling. I fear that we are gradually approaching a catastrophe.

Perhaps one other consideration is also deterring nuclear war; after all, there is not merely a question of mutual nuclear balance. The Japanese people have wanted a ban on atomic and hydrogen bombs extending back 30 odd years. When you look at banning atomic and hydrogen bombs, the fact is that during these 30 odd years, prayers for renunciation of nuclear weapons have gradually been spreading worldwide. At the popular level, formerly only the Japanese people participated in the movement to ban atomic and hydrogen weapons, but now Americans and some Europeans are also participating. Preventing nuclear war rather than the lack of balance should be the desire of these people, and if this develops, I think the movement will grow.

Soviet Union Reaches Limit

Consultant Kitumura: If you speak of nuclear weapons or of strategic nuclear weapons—they are partially interconnected—generally in the present situation the United States and the Soviet Union have reached parity; however, in medium range nuclear weapons, the Soviet Union is far superior. Consequently, this is becoming a big problem. In possessing conventional military forces, the Soviet Union is totally superior, but if we speak of the problem of either navies or sealanes, which are becoming the current problem, the West is totally superior.

However, if we speak partially, the battle is important to the West, and perhaps if it loses and this becomes a weak point, it would benefit sealane offense and defense, in which the Soviet Union is superior. Consequently, I think the current American endeavor is to try to regain a portion of this crumbling balance and it is seeing allies.

The point is whether the West is progressing in limited arms reduction while increasing defensive strength. This problem has appeared before, but I think it is limited. To repeat: perhaps for the first time, the Soviet Union has reached its economic limit.

If this continues, I have a feeling that the Soviet Union, cornered to the extent of fearing collapse of its society, will not increase the level of this balance and may go in the direction of reduction.

Although Nuclear Balance Crumbles

Consultant Unabara: From the beginning there has been talk not of the problem, but merely an explanation of the words, whether the balance will be maintained or will collapse, but I do not understand the word balance. Originally, I thought that the word balance was being given the same weight on both sides.

An example is that 10 years ago America was overwhelmingly strong in nuclear power. America was 100 percent, while the Soviet Union was about 10 to 20 percent. How can you speak of balance at that time? The remote, backward Soviet Union has now reached parity with America. From now on, balance means the preservation of this. For the sake of argument, in the event America would become weaker than the Soviet Union, I simply cannot understand the point about where the balance might collapse or the balance might be preserved.

Regarding current aspects, there are varying opinions about which are better, the decisions of the Reagan administration or the decisions of secretaries of defense of former cabinets. On that point, also, I don't understand either viewpoint. Therefore, I think controversy over whether there is balance is extremely risky.

I especially want to say that I want to embrace two distinct areas, the problem of coping and the problem of deciding. I have not reached the conclusion that the collapse of the balance in nuclear war strength would result in the outbreak of war.

Consultant Asonuma: The balance of which consultant Unabara just spoke is given the same weight on both sides, but central to that policy is certainly the issue of where the balance lies. As was said before, when you consider the ocean alliance and continental systems, the concern for that force is also America's. This concerns not only sealane defense but also, of course, the problem of nuclear weapons. I think that the conclusion must be that if we stand behind the American cushion, where there is complete balance, Japan is one part of that balance.

Unillateral Defense No Protection

Assemblyman Shibuya: Sealane defense has no limits, and using ordinary common sense, the side that realizes this first will decide to proceed. Even considering the present defense strength of the Maritime Self-Defense Force and the Air Self-Defense Force, how can such a broad area be defended alone?

Returning again to the original point, from the narrow viewpoint of the defensive forces and equipment available for the unilateral defense of territorial waters, Japan is considered to lack prestige among sovereign nations.

Consultant Kitamura: As was said in the beginning, sealane defense is no good at all, but perhaps ground defense. The sea is more important, because we cannot protect a long perimeter extending thousands of kilometers, with hundreds of kilometers of roads and railways to defend. My colleagues may have mentioned the problem of defense underwater; however, the performance of the latest equipment to search for submarines is markedly increasing.

I, who served 7 years as a unit commander or staff officer and a year and a half as a seagoing escort group commander in the Maritime Self-Defense Force, went to training and maneuvers and myself planned operations for sealane defense in various situations, had made that assessment but now I consider that

it can be done thoroughly if we have equipment and systems with today's remarkably improved performance.

I would be happy if these were double the present number of escort groups. At present there are four groups. If I were to decide on the number of escort ships, I would consider the absolute minimum to be added to the present 60, which includes coastal units, to be another 25 or 30 ships.

First, I want to mention that 100 large P-3C antisubmarine aircraft were decided upon as an objective, but wouldn't it be better to increase this by 20 to 30 aircraft and thereby negate the endless need for increasing military forces?

Finally, it has been asked: What if the sealane defense were breached and the unilateral defense were penetrated? But if that unilateral defense were penetrated, what would be done about such things as food? I think it is probable that the people could not survive.

It is acknowledged that the percentage of domestic self-sufficiency in food and conversion of grain is less than 40 percent. Even if close attention were given to defense of the country, the people could not survive; however, we also could not surrender, since not winning would result in an ignoble death. Therefore, I consider that the defense of Japan would not be realized without insuring minimal imports and preparation of a winning attitude.

Can or Cannot

Consultant Unzbara: I would like to say two things. First, we speak of 1,000 nautical miles, but for a long time there has been a desire to patrol that far. Patrolling is limited. That means having the responsibility for defense that far for some time, and the details have also changed. I don't know when or how they changed. I completely and qualitatively disagree with the significance of having the defense responsibility for the occur area within those bounds and with patrolling, but there is no Diet debate on this point.

Second, a good discussion of defense you could argue that "can" is written with three Japanese characters, and "cannot" is written with four, but this is extremely dangerous. Discussion of "can" and "cannot" is important in determining whether some effect is obtained if something is done in some circumstances. As a matter of fact, it is not true about a definite number of Japanese characters. In conclusion, I think a reply merely deciding whether we can or cannot is risky in that coming to only an arithmetic solution is totally meaningless.

Bases Protected in Emergencies

Assemblyman Tachigi: First, I would like to ask a question of Consultant Unabara. Before I ask though, a little while ago he made point number 2 concerning an emergency scenario in response to a colleague assemblyman's question. With the withdrawal of U.S. forces from Japan would come vigorous work to realize a communist Japan. Drawing a comparison with Afghanistan, it

has been said that if there were a democratic socialist government in Hokkaido, it would be an invitation to Soviet military forces, but in using the words desocratic socialist government, we want to speak cautiously; however, realistically we do not plan on having a democratic socialist government.

Thus, I do not consider at all that we would be simultaneously inviting the Soviet Union. At the same time, we would plan to fight resolutely in the event the Soviet Union were to interfere or intervene in Japan. I think this should be said as a precaution, since it is best not to be misunderstood.

Concerning the above question, sealane defense in today's world is unimportant in peacetime. And depending on the origin of attack, it would be impossible in an emergency because before the emergency arose, the radar and air bases would probably be attacked. Therefore it can be said that there is no possibility. Then, if the basis for circumstances to defend the radar and air bases arises, how is sealane defense possible in an emergency?

Consultant Unabara: My speech of a little while ago has been corrected, but to my recollection, I did not say democratic socialist—I intended to say, popular democratic principles government—but if I did say that, I was not speaking particularly of any specific political party or group. I am merely correcting my manner of speaking a little while ago, because of the words I may have used concerning the relationship between the people's liberation struggle and the so-called people's democratic principle.

Then, we come to the next question: the example given of radar sites is a concrete example of how susceptible Japan is to Soviet attack. There is nothing to be done if you live near a radar site.

Right now discussions are on going about insuring the security and defense of the sealanes, using Eagle patrol planes plus escort ships for antisubmarine warfare to insure security of the sealanes. I think this is a mistake. In the event of war, there are underwater submarines and surface ships to obstruct the safety of Japanese maritime navigation, and these include destroyers, cruisers and aircraft carriers. Then, of course, there are also attacks from the air by long-range bombers and ocean patrol planes.

Consequently, there is danger in replacing Eagle ASW to insure the safety of maritime navigation. The difficulties of discovery and detection of submarines by the type of ASW described a little while ago were apparently used in the NHK "Ocean Defense Line." Sardine school? Whale? Boat? I understand that on the spot it is very difficult to determine what is a surface ship and what is a submarine.

Therefore it is an extremely difficult technical problem, but I will briefly conclude by saying that it should be entirely rejected. Depending on when and how the situation is envisioned, the radar site example is normally all right but the decision is "no" to include such situations.

American Coercion a Mistake

Assemblyman Tachigi: I understand. Why should we endeavor with all our might for this when only a little while ago I said that it is unimportant in peace-time and impossible in an emergency? Even though that point is a political problem, perhaps if there were a good opinion....

Consultant Unabara: That is what I said in my opening statement. There is also the viewpoint that we should make a concrete effort to prove or make a gesture to demonstrate to an allied nation, the United States, the so-called Japanese defense effort to insure sealane safety. America talked of various things to Japan and originally Japan responded with this solution.

People knowledgeable about the sea, since before I became a security section chief in the National Safety Force in 1952, have said in high-level communications with America that they want to build helicopter carriers. I became director general of the Defense Bureau just before the Second Strength and Equipment Plan was adopted. That was 27 December 1960, but a week earlier, the Defense Agency had said it would build four groups of helicopter carriers. I became director general of the Defense Bureau, and as a result of a study of concrete details, it was not published in the Second Strength and Equipment Plan.

Thus these helicopter carriers were mentioned in the documents of that time sent to the American chief of naval operations. Accordingly, Japan wanted to do such things, and since the allied nations were considered the "parent," the Japanese defensive endeavors were never enough for America. Therefore, Japan said it would do more, and when Suzuki Sori went to America, the wording of a joint declaration plainly said: "by all means." Therefore this can be seen as the first apparent American demand or coercion, but I think it was a complete mistake.

Defense Contingent Upon Budget

Assemblyman Tachigi: Next, I would like to ask consultant Kitamura a question: A little while ago I heard it said that there was no fear of Japan being engulfed in a war started by America and that such opinions were not appropriate. At the same time, it is important to look at today's international situation; if a U.S.-Soviet war were to start in a place other than Japan, it could be assumed that the situation would spread to an attack upon Japan.

Consultant Kitamura: I think this is mixing two different questions. The one just mentioned concerns whether Japan would be engulfed in an American war, while the previous discussion concerned being drawn into an American war if the channel was defended. I said that Japan must defend the channel because if such a situation were to arise, the procedure would be the reverse.

However, as for the total picture, an example of the widest scope is a conventional military confrontation between the United States and the Soviet Union in the Middle East which would expand to an international scale in the event a settlement could not be reached there. In that case, I don't know whether

Japan would be drawn in, but it would necessarily mean that Japan would be confronted with a great war between East and West. That is what I said.

Assembly Tachigi: For example, there are now 60 escort ships, although in the future I would like to add 25 more, and there are 100 airplanes like the P-3C, but 20 to 30 more are needed. A budget of approximately another 1.5 trillion yen is necessary because an escort ship costs 60 billion yen. A P-3C costs 11 billion yen, and an increase of 30 planes would require 330 billion yen. What does Consultant Kitamura consider an appropriate budget for making possible total sealane defense?

Consultant Kitamura: At present there is no data available, but study was made 2 or 3 years ago by the Japanese Strategic Research Center. It delineated the basis for the protection of Japan and gave the total cost and premise for reinforcing the Ground Self-Defense Force, the Air Self-Defense Force and the Maritime Self-Defense Force, but the annual percentage is gradually increasing, with the latest reliable figure being in the vicinity of 2.5 percent of GNP, and if that seems to be a lot, it is the calculation which determines the forces for protecting all of Japan.

Assemblyman Tachigi: Consultant Kitamura wrote in "The Soviet Military as Seen by the Self-Defense Forces" and in other places that if a situation should occur wherein Japanese merchant ships were to receive an attack, the problem would arise as to whether this would be deemed a direct attack upon Japan, and it is not clear whether that would be considered a direct attack. It would obviously be within the scope of self-defense under international law, a portion indicating that it would be possible to invoke the Japan-U.S. Security Treaty. What do you consultants think about the government viewpoint that if there is an armed attack on Japanese territory, it is possible to invoke the security treaty? This causes a great deal of anxiety and concern about the right of collective self-defense.

Consultant Kitamura: I am not sure whether I know, since I have no clear recollection. I did not intend to speak about that. Perhaps I said that I intended to do so. Japanese ships, even if attacked on the high seas, become an object for exercising the right of self-defense. This is the interpretation of international law. However, as to whether or not Japan can invoke the Japan-U.S. Security Treaty, mere observance of a clause of the security treaty, "...in the event an attack is made on places under Japanese jurisdiction," becomes the object for exercising Japan's peculiar right of self-defense, but whether or not to invoke the Japan-U.S. Security Treaty is a separate problem.

Peace Maintenance or Peace Movement

Assemblyman Tachigi: I have a question for you four. In America today, movements about issues such as a nuclear freeze are popular. Also, even in Europe, there seems to be agreement on so-called nuclear weapons stationing in West Europe; it is agreement on opposition to American stationing of new missiles in Europe, and the Soviet Union (East Europe) also opposes nuclear weapons stationing. In the long run, our movement not approving stationing is spreading even to nuclear nations. Movements concerning the nuclear problem

appear to be progressing in agreement with views in Japan. Regarding so-called maintenance of peace for the future, do you think there is any connection between this movement and movements desiring peace?

Consultant Asonua: Now, about the use of the word peace. To me peace is an actual living peace, not a utopian peace, and I think we must have this view-point in order to maintain peace.

Is the present peace an actual living peace? It is peace in a situation of checking nuclear weapons. A little while ago I stopped short, but I think that it is likely that the power to check strategic deployment is the power to check nuclear war. Also, peace on the seas is concerned with the strategic deployment of SLBM's. Both the United States and the Soviet Union are involved in ASW efforts for that. I think peace is likely in such a situation.

Consultant Unabara: We are critics, but are at the same time we are citizens. As for the hopes of one citizen, it is the desire for nuclear weapons to disappear. I think there is absolutely no one who opposes this.

At present, besides the United States and the Soviet Union, other nations also possess nuclear weapons. Because too many have a nuclear war potential, I think it is necessary to freeze, reduce and then curtail it and since there is too much regard for political endeavors in the direction of abrogating this and to oppose composition of this in international politics. Other than that, I have no qualifications and no viewpoint to speak about how and what should be done, because there are various thoughts and various viewpoints on measures for that.

Consultant Kitamura: I think basically that nothing can be done to lower the nuclear weapons level of the Soviet Union other than the methods being employed by the current Reagan administration.

Consultant Pujii: Preparations for war provoke war. Although you endeavor for the preservation of peace, you can defend against war. This lesson is an indisputable historical fact. In Okinawa recently, sixth grade children responded to a survey about how they thought the world could best prevent war by saying that to make many people oppose war, you teach the horrors of war. I have one more thing to say. These sixth grade children talk of changing world politicians into people thinking of total peace. I consider that our defense against war is dependent upon this type of thing being done.

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ECONOMIC

DYNAMICS OF JAPANESE EFFECTIVENESS IN 1970'S REPORTED

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[Article by B. N. Dobrovinskiy: "Dynamics of Japanese Economic Effectiveness in the 1970's"]

[Text] The author of this article uses an analysis of changes in the coefficients of naterial-intensiveness, return on capital and labor expenditures to demonstrate the dynamics of Japanese economic effectiveness in the 1970's in comparison to the previous decade. He explains the reasons for the slower rise of effectiveness indicators and discusses the measures taken by monopolies and the state to counteract unfavorable tendencies.

In the 1970's the Japanese economy was distinguished by many particular features, but most of all by a change in the type of economic development and a move from the high growth rates of social production in the 1960's to a rate only half as high. This deceleration, stemming from the influence of many factors of a cyclical and structural nature, affected all facets of economic life, including indicators of the effectiveness of social production. Now did dynamics of effectiveness change in comparison to the 1960's? What was the reason for the changes and what was done to stop the unfavorable tendencies toward declining effectiveness? These and other questions require thorough examination, so that the problems encountered by the Japanese economy during the period in question can be assessed from all sides. But before the questions can be answered, a precise definition must be found for the term "economic effectiveness."

Some Methodological Considerations

Economic effectiveness generally includes the following aspects: the effectiveness of product manufacture, its distribution and sale, the effectiveness of foreign economic activity, etc. The author of this article will concentrate on the effectiveness of product manufacture, including related aspects of the functioning of the economic mechanism and the use of productive resources. In the most general terms, the matter in question is the ratio—both current and projected—of the results of social production to expenditures of all types of

resources. This view of the matter is based on the well-known definition of economic effectiveness as a category of social production. It, as speakers noted at the 24th CPSU Congress, "consists in achieving a sizeable increase in production volume and national income for each unit of expenditures—labor, material and financial" [1]. The reduction of expenditures per unit of product (proportional expenditures) indicates successful progression toward effectiveness; conversely, increased expenditures attest to defects in the economic mechanism. Sometimes expenditures decrease, but to a lesser degree than during a comparable period in the past. This was precisely the case in the Japanese economy in the 1970's. In this case it is said that the growth rate of effectiveness is declining.

What should represent the results of production, so that calculations of effectiveness dynamics can be as accurate as possible? Researchers are now almost unanimous in the view that these results should be measured by indicators of the final product-that is, the product which has undergone all stages of intermediate and final processing, has left the production sphere and is available for personal or productive use in the current economic year or as capital for the augmentation of production stocks for the next year. As for the expenditures connected with the manufacture of the final product, they are outlays on raw material, fuel, auxiliary material, semifinished goods (that is, objects of labor), compensation for the depreciation of machines, equipment, tools, instruments and production buildings (amortization of the means of labor) and wages. When these outlays are compared to the manufactured product, they are expressed in indicators of material-intensiveness, return on capital and labor expenditures, and changes in these indicators are used to judge the dynamics of effectiveness. But since these indicators often change in different ways, with some of them rising while others do not, the use of some kind of overall (or integral) indicator, capable of reflecting all of these different fluctuations, is essential.

To ensure the comparability of figures used to measure the final product and all of the components of its production cost, the figures are converted into the prices of a particular base year.

The data in the test and table below have been calculated in accordance with these methodological premises.

Description of Basic Parameters of Effectiveness

In our examination of the dynamics of parameters of effectiveness in the decade in question, we should first take a look at the specific indicators which can probably be calculated with the greatest accuracy. One is the output-capital ratio. It is calculated, as we know, as the correlation between product output and the amount of fixed capital consumed (or used) for this purpose. According to our calculations, based on official Japanese statistics, the output-capital coefficient, with buildings included in the capital, rose from 2.80 in 1970 to 3.52 in 1979, or by 25.7 percent, while the corresponding indicator for just productive capital (that is, excluding buildings) rose from 2.06 to 2.54, or 23.3 percent, during the same period. The respective annual growth rates were 2.6 and 2.35 percent. For the sake of comparison, we should note that

productive capital requirements per unit of output rose 4.3 percent between 1961 and 1969, with an annual growth rate of 0.45 percent. Therefore, the tendency toward a more capital-intensive social product in the 1960's was not curtailed but, rather, became more pronounced. The reasons for this will be discussed below. Now it is simply important to note that the increase of almost 25 percent over 10 years in capital requirements per unit of product put an additional strain on the economy and required larger investments than if there had been no change in these requirements.

As for labor-intensiveness—the second parameter of effectiveness—it must be said that this indicator did not display any progression in comparison to the previous decade either. The reason was a dramatic decline in the growth rate of labor productivity at that time. The average annual rate of increase was 4.95 percent, as compared to 9.15 percent in the 1960's. For economists who believe that the indicator of labor productivity growth is identical to the indicator of effectiveness, the reduction of the former by almost half over a period of 10 years serves as irrefutable proof of the less effective functioning of the economy. But even if we do not subscribe to this inaccurate, in our opinion, narrow interpretation of effectiveness but proceed from the well-known premise of economic science that expenditures on live labor per unit of product (proportional expenditures) are directly proportional to the average wage and inversely proportional to the average level of labor productivity, it will still appear that the reduction of the latter by almost half should increase expenditures on live labor.

What was the situation with respect to real wages? According to our calculations, again based on official Japanese statistics, the average annual increase in the real wages of people employed as capitalist hirelings was 4.9 percent. This was much lower than the rate of the previous 10 years and slightly lower than the percentage of increase in labor productivity. This meant that Japanese laborers were able to frustrate employers' plans to keep wages from rising at the same rate as productivity. But it also meant that proportional expenditures on live labor were almost unchanged; they did not decrease as they had in the 1960's. This was the situation in the sphere of hired labor. As for the proportional labor expenditures of all people participating in the creation of the final product, we do not have enough information to calculate the exact figures. Available indirect data tell us, however, that proportional expenditures on live labor rose in the 1970's.

The third parameter, material-intensiveness, varies depending on the point of departure for its calculation. Calculated in current prices, it seems to have risen dramatically, but this is the natural result of the multiple increase in the world prices of oil, coal, metallic ores and other raw materials. The negative appearance of this indicator cannot be ignored on the grounds that it stems only from price dynamics. It had the perceptible impact of deforming the structure of production costs each year. If, on the other hand, we calculate material-intensiveness dynamics on the basis of natural indicators—for example, changes in petroleum expenditures per unit of product, coal expenditures per smelting unit, etc.—it appears that the conservation of raw materials, fuel and auxiliary materials brought about considerable improvements in the state of affairs. For example, the more efficient use of energy in virtually all

industries in 1978 produced 22.5 percent more GNP per unit of energy than in 1970. The energy consumed in ferrous metallurgy (coal equivalent) was 94.2 million tons in 1973 and 77.5 million tons in 1978—that is, 17.7 percent less, with a decrease of 12.8 percent in the output of cast iron, 14.4 percent in the steel output and 16.7 percent in the output of hot rolled steel (calculated according to [9]). Therefore, proportional expenditures of energy were reduced appreciably in this traditionally energy-intensive industry. Many examples of this kind could be cited, and all of them would testify unequivocally to a considerable savings in the objects of labor, whether in terms of total figures or per unit of product. According to our calculations, based on the use of new objects of labor, the coefficient of material-intensiveness, in 1970 prices, was more than 15 percent lower in the last year of the decade than it had been in 1970.

This means that capital requirements rose perceptibly, proportional expenditures on live labor increased and material-intensiveness decreased in the 1970's. Under these circumstances, what happened to the integral indicator of effectiveness, synthesizing the varying behavior of specific indicators? Any exact calculation is still impossible, but preliminary data indicate that the integral indicator was better in the 1970's than in the previous decade. Graphic evidence can be found in the declining profit norm of many corporations, noted repeatedly with anxiety in the Japanese press, which ascertained the deterioration of expenditure-output proportions. This was a direct reflection of the general complication of the economic situation in the 1970's.

Reasons for Unfavorable Changes in Several Effectiveness Indicators

It is known that the degree of economic effectiveness largely determines possibilities for the augmentation of national income growth rates, the enhancement of public well-being and the reduction of production costs. But there is also a reciprocal connection because the dynamics of effectiveness depend largely on the state of the economy, the conditions of production, the nature of foreign economic activity and several other factors. The Japanese experience of the 1970's cogently demonstrated this reciprocal relationship by proving that an ailing economy could give rise to many factors decelerating the rise of effectiveness indicators. A more complete description of these factors will therefore necessitate an analysis of the economic situation during the period in question and of the influence of certain features of this situation on effectiveness.

The state of the economy and the nature of changes in its indicators each year are presented in general terms in the table. It illustrates the scales and rates of production growth and the conditions of sales of products for investment purposes, for personal and state consumption and for export. From our vantage point, the most interesting indicators are those measuring the deceleration of economic growth rates. The average annual GNP increase was 5.4 percent in the 1970's, as compared to 11.2 percent in the previous 10 years. The growth rate of industrial production displayed a more sizeable decrease—from over 14 percent in the 1960's to 4.35 percent. This also happened to investments in fixed capital (4.85 percent a year on the average, as compared to 14.6 percent). The economy entered a stage of slower movement in all areas under the influence of external and internal factors.

Average annual Indicators of Japanese Economic Development in 1970's (Absolute Figures, Yearly Changes and Average Annual Increases, Calculated in 1970 Prices for Calendar Years)

Toda	1970	1621	1972	1971	1974	1976	1976	1977	8201	1679	increase for 10 years (1979)
						77					
GNP, trillions of											
yen	73.6	77.3	84.6	93.0	92.7	93.9	100.0	105.4	111.6	118.3	160.73
Increase for year, I	11.7	5.0	4.6	6.6	6.9	1.3	6.5	5.4	5.9	0.9	5.40
Industrial output											
Index (1975-100)	90.9	93.3	100.0	117.0	112.3	100.0	11111	115.7	122.8	133.3	146.60
Increase for year, I	13.8	5.6	7.1	17.0	0.4	-11.1	14.1	4.1	6.1	8.3	4.35
Investments in produc-											
tive capital and buildings, trillions											
of yen		27.1	30.0	34.5	31.3	30.6	31.6	33.3	36.6	39.8	153.08
Change for year, I	14.5	4.2	10.7	15.0	-9.3	-2.2	3.3	4.1	5.5	8.7	4.85
Consumer spending,											
trillions of yen	38.6	41.2	45.2	49.5	6.69	52.1	54.4	56.5	59.6	63.1	163.47
Increase for year, I	8.4	6.9	8.7	9.5	8.0	4.4	4.4	3.9	5.5	5.9	8.60
Current state expen-											
ditures, trillions										6	
of yen	5.4	5.7	6.1	6.5	6.7	7.1	7.4	7.6	8.1	8.5	157.40
Increase for year, I	5.9	5.5	7.0	9.9	3.1	6.0	4.2	2.7	9.9	4.9	5.15
Exports, billion of											
dollars	19.3	24.0	28.6	36.9	55.5	55.7	67.2	80.5	97.5	103.1	534.20
Increase for year, I	20.6	24.3	19.2	29.0	50.4	0.3	20.6	20.0	21.1	5.7	20.45
Imports, billions of											
dollars	18.9	19.7	23.5	38.3	62.1	57.9	64.8	10.8	79.3	110.6	\$85.18
Increase for year, I	26.0	4.2	19.3	63.0	62.1	8.9-	11.9	9.3	12.0	39.5	21.70
Consumer price index											
(1970-100)	100.0	105.8	111.0	121.9	147.1	163.9	177.6	190.5	198.6	206.7	206.75
Increase for year, I	7.2	5.8	4.9	9.8	20.1	11.4	4.8	7.3	4.2	4.1	9.50

[·] For fiscal years, beginning on 1 April.

Sources: "Mithon tokei menkan, 1973/74," pp 238, 288; [7, 1980, pp 80-82, 280-283; 6, February 1981, No 238, p 127; 8, 1980, No 2; 4, 1975, pp 307, 309; 1979, pp 338, 341] and author's calculations based on these sources.

The Japanese economy, which is an organic part of the world capitalist economy and is integrated with it more closely than other economies by virtue of its greater dependence on imported objects of labor and exports of finished products, had a severe reaction to the shocks suffered by the capitalist world three times during the short space of 10 years (in 1969-1970, 1974-1975 and 1979-1980) from cyclical crises, structural disorders, inflation, disruptions of the monetary system and acute unemployment. It was also sit hard by the decline of average annual real GNP growth rates in developed capitalist countries to 3.2 percent between 1971 and 1980 (5 percent in 1961-1970) and the related decline of the growth rates of gross capital investments to 2.4 percent (6.3), of industrial production to 3.2 percent (5.8) and of exports to 5.9 percent (7.8) and, conversely, by the rise of 8.9 percent, as compared to 3.3 percent in the previous decade, in average annual rates of inflation and of 4.6 percent, as compared to 2.9 percent, in the level of unemployment (see [2, 1981, No 3, p 19]).

In spite of the heavy burden placed on Japanese economic development by external factors, internal factors were the main reasons for the dramatic deceleration of its growth. Possibilities for the augmentation of production output were reduced primarily by the exacerbation of problems in the sale of products in the domestic market as a result of the slower growth of the real income of laboring strata, alternating with periods of no growth whatsoever and even decreases in comparison to the previous year's wages. Other reasons were the relative overaccumulation of fixed capital, the intensification of sectorial disparities and the unfavorable structure of the fuel and energy supply. All of this led to the development and reinforcement of a stable long-term tendency toward slower economic growth, a tendency which transcended the limits of a single cycle.

What effect did this have on effectiveness indicators? Above all, it lowered the return on capital. Output per unit of fixed capital was smaller than during the period of high growth rates. The production capacities of many industries were underutilized, but their value remained the same in accounts and was therefore included in calculations of the return on capital. Besides this, the slower economic growth impeded the augmentation of labor productivity because the reduced output was produced by almost the same number of workers. Although employers constantly complained about the oversaturation of production with manpower and tried to get rid of what they called "superfluous fat," they had to consider the impact of the system of career hired labor and the probability that mass layoffs would exacerbate social conflicts.

Another characteristic feature of economic development in the 1970's, the lack of uniformity in its dynamics from year to year, also had a negative effect on indicators of effectiveness. The instability of economic indicators, engendered by fluctuations in market conditions, recession and so forth, had been noticed in the previous 15 years, but no one had ever seen the fluctuation of GNP growth rates range from 11.7 percent (1970) to 1.3 percent (1975). Furthermore, there had never been so much fluctuation in the growth indicators of the output of the extractive and processing industries (2.6 percent in 1971 and 17 percent in 1973). One of the main reasons for this was that the Japanese economy suffered two severe shocks in the 1970's: the recession of

1970-1971 and the crisis of 1974-1975. The latter was the most severe of the postwar period. Industrial output was 4 percent smaller in 1974 than it had been the previous year end 11 percent smaller in 1975 than in 1974. The main reasons for the crisis were the slower growth of personal consumption and the decline of investments in fixed capital. During these 2 years the rise in consumer demand barely corresponded to the rise in the particular part of natural demand that accompanies population growth. The critical decline of production was accelerated by the rising cost of oil and several raw materials in world markets.

The emergence from the crisis turned but to be a lengthy and painful process. Industrial production reached its 1973 level only in the third quarter of 1978, only after 4 years. Although the GNP had already surpassed the 1973 level by 1975, the increase was only about 1 percent. The post-crisis period in the Japanese economy was marked by adaptation to radically lower rates of economic growth. The extraordinarily uneven nature of economic development led inevitably to unstable effectiveness indicators, with all of the ensuing unfavorable consequences.

Effectiveness dynamics were also influenced by changes in the sphere of capital investments. The scales of fixed capital accumulation and the speed of the incorporation of scientific and technical achievements in production depend on the intensity of the investment process. This process was distinguished by several important features in the 1970's. On the one hand, there was a substantial increase in total capital investments in comparison to the previous period. For example, between 1970 and 1979 investments in productive capital and housing totaled 320.8 trillion yen (in 1970 prices) or almost three-fourths of the value of all fixed capital at the end of 1979. This sum was 1.8 times as great as the total capital investments for the previous 15 years. On the other hand, the rate of investment increase slowed down considerably. The data in Table 1 show a double-digit increase in only 3 years out of the 10, whereas the average annual rate in the 1960's was 14.6 percent. During the decade in question this average indicator dropped to 4.85 percent, or one-third of the previous figure. The reasons for this dramatic deceleration were the overall deterioration of the investment climate and the monopolies' lack of any perceptible interest in enlarging the production network at a time when even existing capital was being underutilized. On the whole, the sluggish investment process impeded the rise of the capital-labor ratio in social production and thereby prevented the augmentation of the productivity of live labor and, consequently, the rise of effectiveness indicators.

In the 1970's the economy's dependence on foreign markets became stronger. There was a constant rise in the percentage of domestic products sold outside domestic market. Whereas exports, calculated in yen in 1970 prices, resented 7.7 percent of the sold GNP in 1960 and 11.2 percent in 1970, in 1979 the figure rose to 17.8 percent (see [2, 1979, No 1, p 155; 6, February 1981, pp 127-128]). The increasing share of the GNP sold outside the domestic market made the Japanese economy more and more dependent on conditions in the world capitalist economy. Obviously, the deterioration of these conditions over a period of several years had to, and did, have a negative effect on rates of Japanese economic development, and this, as mentioned above, had a negative impact on effectiveness indicators.

This was also the result of the exacerbation of trade and economic conflicts between Japan and its partners—the United States and the EEC countries. These were caused mainly by the intensification of Japanese exports. The average annual increase in exports in the 1970's was 20.45 percent, as compared to 16.2 percent in the previous 10 years (calculated in dollars, in 1970 prices).

The increasing importance of the foreign factor was also reflected when imports—with raw materials, semimanufactured items and energy resources representing around four-fifths of the total—rose from 9.9 percent of the value of the GNP in 1970 to 13 percent in 1979. The average annual increase was 21.7 percent. Given the dramatic rise of world prices for objects of labor, this meant that even in the years when the physical volume of imports displayed only a slight increase, their total cost rose dramatically (63 percent in 1973, for example, and 62 percent in 1974). The resulting negative impact on effectiveness was connected with the tendency of the rising cost of objects of labor to deform the existing structure of production outlays by increasing the portion used in the calculation of material—intensiveness.

The more intensive export of capital in the 1970's also influenced indicators of effectiveness. Authorized exports of capital from Japan during that period totaled 32.7 billion dollars (calculated according to [5, 1976, p 208; 1979, p 305; 3])—that is, a sum 10 times larger than the total for the previous two decades. The figure in 1979 was 5.5 times as high as the 1970 figure. The export of capital effectively secured a guaranteed supply of raw materials and energy and promoted the sale of Japanese products abroad for the purpose of increasing total profits and raising the profit margin, but it also sustained unemployment to some degree, keeping more than a million people unemployed and not reducing the size of the unemployed labor force even during years of economic growth. It contributed to the creation of jobs outside the country that could have been filled in Japan. This immobilized part of the principal productive factor to which the economy owed the creation of new value and which was most capable of securing heightened effectiveness.

Something should also be said about the unfavorable impact of inflationary processes, the augmentation of the amount of money in circulation beyond the amount required for commodity exchange, and the radical, frequent and unpredictable fluctuations in the yen exchange rate. Since all of these factors had a restraining effect on consumer demand, they complicated reproduction processes in general and inhibited the growth of the effectiveness of social production.

Finally, something must be said about the negative effects of the structural disparities that had accumulated over the two previous decades. The crisis of the mid-1970's laid them bare. The excessive development of material-intensive branches, the lopsided fuel and energy complex, rebuilt in the 1960's with almost exclusive reliance on oil, the insignificant percentage of science-intensive branches and the retention of a high percentage of labor-intensive branches became obvious. It was also learned that the resulting economic structure conflicted with the changing demand in the world market, displaying an increasing need for technically complex consumer products and production equipment. Finally, it was learned that the production structure

in countries developing at a relatively rapid rate, such as South Korea and others, was converging more with the Japanese structure, as a result of which the products of these countries began to crowd Japanese goods out of even the the Japanese domestic market because the comparatively cheap labor in these countries gave their goods more competitive potential. On the whole, the existence of serious structural disparities complicated the efforts to reduce production costs and the search for ways of heightening the effectiveness of production.

This certainly does not exhaust the list of ways in which the specific economic features of the 1970's influenced effectiveness. Even this is sufficient proof, however, that the seriously deteriorating health of the economy had an oppressive impact on effectiveness dynamics.

Measures To Counteract Negative Tendencies

It would be wrong to believe that the monopolies and the state took no notice of the birth and development of these negative tendencies. Available data testify unequivocally that they made vigorous efforts to combat these tendencies with the aid of the objective laws governing the development of productive forces.

At first, the intensification of scientific and technical progress was seen as a solution. For this purpose, the number of research establishments was increased by almost one-third over the 10 years (from 12,594 in 1970 to 16,269 in 1979) and the number of personnel working in these establishments was augmented by almost 30 percent (from 392,000 in 1970 to 496,000 in 1979). Total expenditures on research and development projects (R & D) rose to 140 trillion yen (in 1970 prices) over the decade, or double the indicator for the previous decade. The number of patents issued for new inventions and advancements over just 8 years (1970-1977) was 45.2 percent higher than the figure for the entire decade of the 1960's (330,400 and 227,500 respectively). Japanese R & D turned out to be extremely successful in several important fields, primarily electronics, robot engineering, the improvement of motor vehicle design, the improvement of the parameters of machine tools with digital programmed control, the design of audio and video equipment and particularly complex medical equipment and the development of the latest medicines.

The state actively encouraged R & D by allowing private corporations substantial tax deductions, securing credit for them on preferential terms, instituting a shorter depreciation term for the equipment of research institutes and establishing state-private corporations for joint research and design projects. Private firms were given broader access to the research findings of government research organizations. Besides this, the state continuously expanded, and made structural improvements in, its agencies in charge of forecasting scientific and technical development on the governmental level, setting long-range scientific research priorities, drawing up large-scale special programs and overseeing the work on these programs. State budget allocations for R & D rose constantly, with the rate of increase over the previous year reaching 14 percent in 1976, 12.8 percent in 1977, 13.8 percent in 1978 and 14.3 percent in 1979. In the last of the sequence, state budget allocations for R & D

totaled 1,132,000,000 yen. The state took steps to supply the private sector with more extensive forecasting information, shared the cost of R & D in the private sector and endeavored to strengthen the traditional ties between government research establishments and corporate research subdivisions. On the whole, all of the government's varied efforts to stimulate R & D aided in preventing the decline of effectiveness indicators.

In addition to augmenting their own efforts, the monopolies purchased more foreign patents, licenses and expertise in the 1970's. For example, 14,500 licenses were acquired just in line with type "A" agreements (payment in foreign currency and for more than a year) between 1970 and 1978 (see [5] for 1969, 1970, 1973, 1974 and 1979). This was twice the figure for the entire decade of the 1960's.

Other types of government intervention in economic affairs were also supposed to impede the decline of effectiveness indicators. This was particularly true of the government's stepped-up investment activity. Japan resorted to the expansion of government investment demand many times, to compensate for at least part of the decrease in private (investment and personal) consumption. Total state investments in fixed capital displayed a particularly significant increase in 1971, 1977 and 1978, when other measures which were taken to accelerate the passage of post-crisis phases of depression and recovery did not have the anticipated impact. For most of this period, the annual increase in government capital investments was 15 percent or higher, and the average increase was 7.3 percent a year. In other words, it exceeded the GNP growth indicator. State investments in fixed capital totaled 76.7 trillion yen in 1970-1978, and total investments in 1978 were 1.8 times as great as the 1970 figure. In adultion, the total current government expenditures amounted to 61.5 trillion yen over the decade. Therefore, in cost terms, government consumption almost reached 140 trillion yen (in 1970 prices).6 Although the government's share of total consumption was relatively stable (17.4 percent in 1970 and 15.6 percent in 1978), the intensive maneuvering of annual dimensions became an effective means of stimulating market activity.

The changing scales of state investment activity had conflicting effects on dynamics of effectiveness. Larger state capital investments in bad years kept the economy from growing too sluggish and stopped the erosion of the output-expenditure balance by preventing the decline of GNP growth rates. To some degree, however, it raised the national economic indicator of capital requirements per unit of product because it expanded the particular portion of total capital represented by productive assets and the social infrastructure, where the return on capital is generally lower than in industry. All economic extremes, whether they take the form of "overheating" or "overcooling," have an oppressive impact on the effectiveness of social production. Consequently, anything that is done to prevent or eliminate these extremes will also aid in eliminating this negative tendency. The Japanese Government countered it by manipulating the interest rate in Japanese banks (it was lowered four times in 1971 and 1975 and was raised several times in other years), by regulating (through the channels of "administrative control") the dimensions of productive capacities of structurally flawed branches (the aluminum industry, shipbuilding and some branches of chemical production) and by taking several other steps.

The methods of so-called economic diplomacy were used more intensively in the 1970's than before. The main purpose was the creation of favorable external conditions for economic development, which would influence effectiveness dynamics in addition to other indicators. The chief priorities included broader access to raw material and sales markets, the resistance of the protectionist aims of rival countries, the consolidation of Japan's position in international monetary organs, etc.

On the whole, state intervention in economic affairs prevented the decline of effectiveness indicators, but it did not (and, of course, could not) prevent crises, stagnation or recession.

The economic structure was also reorganized to counteract the effectiveness indicators which were less favorable than they had been in the 1960's. This was accomplished largely through achievements in science and technology. The tangible features of this reorganization were the result of changes in the structure of employment and the composition of the GNP. For example, a comparison of data for 1970 and 1980 shows a drop from 16.6 to 9.6 percent in the proportion accounted for by people working in agriculture and forestry, a decrease of 2.2 percent in the proportion working in the processing industry and a rise of 2.2 percent in the proportion working in construction. The service sphere also acquired new manpower (14.8 percent and 18.1 percent respectively) (see [11, 12]). From the standpoint of effectiveness dynamics, the redistribution of live labor had conflicting implications. The move away from agriculture to the more productive branches of industry and construction heightened effectiveness, but the fact that most workers moved to the nonproduction sphere and that the relative number of workers in industry decreased tended to minimize the positive nature of changes for some time, even though it would strengthen their influence over the long range.

Date on the structure of the social product indicate that the proportion accounted for by agriculture, forestry, fishing, construction, transportation, communications, public services performed by the private sector, the state and non-profit organizations and electrical, gas and water utilities decreased between 1970 and 1978. On the other hand, there was an increase in the proportion accounted for by the products of the processing industry (from 35.8 to 38.9 percent), trade (from 14.3 to 15.8), finance, insurance and real estate (from 12.7 to 15.8 percent) (see [7, 1980, pp 162-163]).

A quantitative analysis of the processing industry testifies that structural changes in this branch in the 1970's had a significant impact in the sphere of resource conservation. They also marked the beginning of an emphasis on technically complex products reflecting the latest scientific and technical achievements. Nevertheless, available data do not indicate any full-scale radical changes. The transition to the era of mechatronics, the comprehensive computerization and automation of production and labor-free technology remained the province of the 1980's and 1990's.

Japanese monopolies also tried to influence effectiveness indicators by means of the further concentration of production. They saw this as an effective way of reducing production costs. One of the widely used forms of concentration was the cartel. They were formed by leading firms in ferrous and

nonferrous metallurgy, the petroleum and textile industries and others. The creation of cartels was conducted on a particularly broad scale during the crisis of the mid-1970's. But the most significant and characteristic development in the concentration process took place on the highest level—the level of financial—monopoly groups—and in the leading economic branch—the processing industry. Unfortunately, available data are confined to 1976, and this is not a good year for comparison because the total assets of these groups, their sales volumes and their total profits were smaller that year than in preceding years. The reason was that five of these groups (Mitsui, Mitsubishi, Sumitomo, Sanwa and Dai Ichi Kangyo) had a relatively high percentage of firms in the branches that suffered most from the crisis. Nevertheless, even when the 1976 figures are compared to 1970 data, it is clear that the concentration of economic power within the hands of financial—monopoly groups had reached a much higher level. This is illustrated by the following data (see [14, January 1978, p 28]):

Indicators	1970/71	1976/77	1976 in % of 1970
Total assets of financial-monopoly groups, trillions of yen	57.9	141.0	243.6
Owned capital, billions of yen	2,779.7	3,810.0	136.7
Number of employees, thousands	1,758.4	1,718.0	-2.25

Total assets increased almost 1.5-fold and owned capital increased by more than a third just within 7 years.

Information about individual monopolies indicates that the concentration of capital was even more intensive in subsequent years. For example, the assets of the Mitsubishi group in March 1980 were 36.2 percent greater than in 1976 (from 25.7 trillion yen to 35 trillion), and its owned capital was 14.2 percent greater (from 706.9 billion yen to 807 billion) (see [14, December 1980, p 7]). In other words, the concentration was stepped up.

Concentration in the processing industry during that period can be traced most easily in terms of the cost of shipped products. Under the conditions of the modern automation of production and its saturation with computers, cybernetic devices, manipulators and so forth, indicators like the number of persons employed at enterprises have largely ceased to reflect the real state of affairs. If we categorize companies in the processing industry according to amounts of capital, we find each category's share of shipped products (see [2, 1980, No 9, p 118]):

Categories	1970	1976
Major (with more than a billion yen in capital) and large (more than 100		
million yen) companies	61.5	63.9
Medium-sized (from 10 to 100 million yen)	21.6	22.3
Small (under 10 million yen)	16.8	13.6

Within 7 years the proportion accounted for by major and large companies in sales of manufactured goods (and, consequently, in their production) rose by 2.4 percent, the share of medium-sized companies rose 0.7 percent and the share of small companies displayed a decrease of 3.1 percent. This is indisputable evidence of substantial concentration. There is no question that the level of production concentration rose in the second half of the 1970's. Irrefutable proof of this can be found in the increased number of mergers and the number of companies absorbed, including not only medium-sized firms but also extremely large corporations in shipbuilding, ferrous metallurgy, the paper industry and others.

Another form of production concentration which took on impressive dimensions in the 1970's was the action taken by the major and large companies to control medium-sized and small enterprises with the aid of the subcontracting system.

The reduction of expenditures on live labor was another way of counteracting the tendency toward the deterioration of the output-expenditure ratio. In addition to all the technical and organizational measures which were taken to intensify labor and augment its productivity, various programs were carried out for the so-called "reorganization of employment" and the elimination of "surplus" manpower. This was done by encouraging earlier retirement, the dismissal of temporary personnel and day-laborers, the hiring of fewer graduates of academic institutions, etc. The results of this "reorganization" can be illustrated by the five financial-industrial groups mentioned above. Although their sales volume (excluding insurance and banking operations) in 1976 was 2.3 times the 1970 volume, they had reduced their total number of employees by 2.25 percent (calculated according to [14, January 1978, p 13]). The reduction was even greater in some groups. These changes led, as demonstrated above, to the formation of a permanent army of unemployed individuals and escalated social tension in the country.

As for the probable dynamics of effectiveness in the 1980's, it must be said that the forecasts compiled by Japanese government and private organizations predict a further rise in capital requirements. This is related to the more intensive mechanization and automation of production, the replacement of live labor with machines, the rising cost of the means of labor due to their increased complexity, etc. It is assumed that reduced expenditures on live labor will compensate for the cost of continuing the capital-intensive type of development. Special emphasis has been placed on comprehensive measures for the conservation of objects of labor in the expectation that the reduction of proportional expenditures on raw materials and fuel can cover losses resulting from the lower return on capital. For the improvement of effectiveness dynamics, the greatest hopes have been placed in the plans for the maximum utilization of electronics in production and concentration on branches requiring a high scientific input. It is still impossible, however, to predict the cost of the projected structural changes, the losses resulting from the curtailment of production with particularly high material and energy requirements and the effect of all this on the cost of the final product. One thing is clear: The continuous decline in production growth rates (attested to by the results of the early 1980's) and all of the implications of this do not hold out much promise for better indicators of effectiveness in the future.

A few words should be said about the social aspect of effectiveness. Japanese employers are trying to convince the laboring public that all participants in production will benefit equally from heightened effectiveness. But this allegation is refuted by the very data on the distribution of national income, which increases as a result of heightened effectiveness. Even during the primary distribution of this income, the proportion accounted for by dividends, rent and interest rose from 7 percent in 1955 to 14.5 percent in 1976 (calculated according to [13; 5, 1978, p 50])—that is, it more than doubled. This was naturally accompanied by the growth of the portion of national income resulting from heightened effectiveness. Furthermore, with the passage of time an increasing share of this income falls into the hands of those who do not work for a living. The sums paid out as bonuses to workers who conserve resources tend to decrease because it is the owners of the capital who derive the greatest advantages from the efforts of the laboring strata to heighten effectiveness.

FOOTNOTES

- For a detailed discussion of processes occurring in the sphere of labor productivity, see [2, 1981, No 6, pp 86-97].
- Calculated according to growth index of paid wages (see [5, 1980, p 293;
 August 1981, p 18]).
- Unless there is some indication to the contrary, these figures and all
 other statistics cited in the article are taken from the table.
- 4. Calculated according to the same sources.
- All R & D data in the article were either taken directly from [5] for 1969-1979 and [10] for 1976, 1978 and 1980 or were calculated by the author with the aid of information from the same sources.
- All indicators of state expenditures were calculated according to [5, 1979, p 493; 7, 1980, pp 70-73].

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